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THE LANGUAGE OF ECONOMICS

There are, no doubt, as Lord Cromer recently had occasion to remark, "some few economic and currency questions which are abstruse, but the difficulty of understanding even these has been in no small degree increased by the cloud of words with which writers on subjects of this sort often surround issues in themselves simple." The obscurity with which he justly enough charges our exponents of economic theory is comparatively speaking a new phenomenon. Up till about forty years ago books on the subject were, as a rule, written in fairly plain language. No one of ordinary education could seriously mistake Adam Smith's meaning; and Mill, except here and there, was reasonably explicit and comprehensible. During the later years of the nineteenth century, however, a different state of things supervened. It began in England with the publication of Jevons' *Theory of Political Economy*, followed, as it was, shortly afterward, by the acclimatization in England of the works of the German writers known as those of the Austrian school. Since that period the science has become every day more and more encumbered with a mass of phraseology altogether unknown to our forefathers. We hear now of disutilities, discommodities, negative values, quasi-rents, consumers' rents, and beyond and above all of marginal utilities, marginal productivities, marginal demand prices, marginal supply prices and so on. So much, indeed, do we hear of things marginal that many writers find that they cannot get through half a dozen lines without the introduction of this previously almost unknown adjective. The general result is that it is becoming impossible even to commence the study of the subject without months or years of preliminary work devoted to the acquirement of an acquaintance with the terminology. If one wishes to investigate so apparently simple a matter as the fluctuations of wages he may find himself told to his astonishment that

in Class A of the second group of industries—say the case of bricklayers—what is best for the workpeople involved depends upon the elasticity of the

short-period demand curve which we suppose to oscillate parallel to itself, the amount of its oscillation and the character of the variation of disutility with the hours of labor per day or per week.¹

This may be all quite accurate, but we cannot help feeling that the use of an occult language of this sort imports a claim on the part of the university economists to some method of discovering the truth on social questions which is not open to the outside world; and as the outside world in this instance embraces experts on social and economic questions in the press, the legislature, and the Bankers Institute quite as competent as any that the universities produce it is not likely that such a claim will be readily conceded. The methods and phraseology of the new school are, it must be admitted, dominant in England at the present moment.²

In France, on the contrary, the Institute and the Faculty of Law, as well as the independent economists who belong to neither, such as M. Yves Guyot, refuse altogether to concern themselves with them,³ and are content to use the language of Say and John Stuart Mill. In Germany the great historical school likewise either ignores or rejects them. In America opinion is divided. At Columbia Professors Clark and Seligman are prominent exponents of the new system. At Harvard Professor Taussig is lukewarm and critical. At Yale President Hadley thinks the new methods should be relegated to the sphere of psychology—anything apparently to get rid of them out of the sphere of economics—while at Chicago Professor Laughlin is frankly and emphatically hostile.

In endeavoring to get at the true significance of the teachings of the new school we cannot perhaps do better than begin by glancing at their much-exploited conception of the "margin." It made its first appearance in economics in the formulation of Ricardo's law of rent. We then first began to hear of the mar-

¹ Chapman, *Work and Wages*, p. 223.

² The English School, it must be remembered, almost to a man accepted bimetallism—or symmetallism—while it was still possible for anyone to accept it. Bimetallism and the mathematical economics indeed belong to the same system of thought.

³ See Professor Gide, "Economic Literature in France at the Beginning of the Twentieth Century," *Economic Journal*, June, 1907.

ginal land which will return the costs of cultivation and yield normal profits to the farmer, but which will afford no surplus available for rent; and of the marginal doses of capital and labor applied to any land, in regard to which the same statements may be said to hold good. These earliest examples of the margin have this much in common with all later ones that one can expatiate on them and can suspend chains of reasoning from them to his heart's content so long as he confines himself to the consideration of them in the abstract; but when we come to close quarters with them and ask the theorist to show us any actual piece of land that at this moment is marginal or any specimen of work at present going on on any farm that involves just the marginal dose of expenditure, we find that no satisfaction is to be got out of him. Some writers, we find, are of opinion that we have to look for the marginal wheat land in the far West of the United States or of Canada; others, on the contrary, think that it is to be found in Essex or in Massachusetts. As to the marginal doses of expenditure they are evidently something that it is still, if possible, more difficult to locate and to identify in individual cases than is the marginal land. Ask any farmer whose ploughing and harrowing operations you see in progress whether he himself can point to any of the work that he has put in hand that will just cover expenses and normal profits and no more; he will probably answer: "I can enlighten you on that point if you will tell me what the coming season will be like, and what next year's prices for wheat will be. As things stand," he may add, "if the price of wheat is over thirty shillings a quarter all the work that you see going on will most likely pay me well; if the price is down to twenty-five shillings a good deal of it will be done at a dead loss." It is clear, indeed, that, in order that it should be possible for us to lay our fingers on any individual specimens of marginal land or of marginal doses of expenditure, we should have to know, among other things, what next year's prices for produce will be. So long as this knowledge is out of our reach, so long will things marginal likewise be for us incognizable. Consider, however, what is the nature of a general conception with regard to which no one can indicate

any individual thing or fact that is embraced under it. This peculiarity at any rate, it will be admitted, differentiates such conceptions from those that are expressed by the universals of ordinary language. The latter are distilled from individual instances; the former plainly cannot be. They remind one of the empty cases in a museum with the labels on them but with no specimens inside them. The new economics is full of these shadows.

It will serve perhaps to illustrate my meaning if we glance at some special instances of the use of the marginal concept. Here is one, for example, from Professor Marshall's *Principles of Economics*. "When a new country is first settled," he remarks, "and land is free, immigration proceeds up to the margin at which the pioneers' endurance is just rewarded."⁴ This point he calls "the margin of immigration." We hear similarly of a margin in agriculture where the use of horse power stops and that of steam power begins;⁵ of one between the use of skilled and unskilled labor;⁶ of the margin of building⁷—the point, that is, at which people cease to add more stories to their houses and build on fresh land instead; of the margin between the use of machinery and of labor,⁸ or between additions to the staff of foremen and that of ordinary workmen;⁹ and of that between rival methods of business organization, the large and the small.¹⁰ The simplest, perhaps, of these is the first mentioned—"the margin of immigration." Referring to the statement in regard to it quoted above, suppose we were to ask the writer: How do you know all this, that "when a new country is first settled and land is free, immigration proceeds up to the margin at which the pioneers' endurance is just rewarded"? His answer would necessarily be this, that there must be a point or zone somewhere which settlement has for the moment reached, and beyond which lies at present the unoccupied wilderness; and further that if this point were not the point at which the pioneers' endurance was just rewarded, settlement would either have advanced farther

⁴ Fifth edition, p. 429, side note.

⁵ *Ibid.*, p. 405.

⁶ *Ibid.*, p. 405.

⁷ *Ibid.*, p. 448.

⁸ *Ibid.*, p. 522.

⁹ *Ibid.*, p. 599.

¹⁰ *Ibid.*, p. 605.

or would not have advanced so far. When all is said and done therefore the whole statement amounts merely to this, that settlement has advanced to the point to which it is found to have advanced, or more simply that settlement in the new country has taken place. Whenever and wherever settlement is in progress all the rest of the statement holds good with reference to it. Its setting forth in words adds nothing whatever to the simple proposition that settlement is in progress or is taking place.

In real life would anyone think of speaking about a margin in such circumstances? Of course there must always be some stage which development of any sort has at a given moment reached, and perhaps you may if you please call this stage "the margin;" but language is ordinarily used to communicate information and such a use of it communicates none at all. Your audience, at the same time, is likely to assume that you do mean to communicate some information, and so the statement is not only surplusage but is also misleading. If your margin corresponded to any general rule, if "the margin of immigration," for example, were always to be found just ten miles from a railway station, then there would be some point and some significance in speaking about it. If it means merely the *de facto* stopping point which neither you nor anyone else can say anything about till after the event, then the mention of a margin does not appear to be legitimate. It means nothing at all. To refer to another example, we are told ¹¹ that "there are some kinds of field work for which horse power is clearly more suitable than steam power and *vice versa*." In such circumstances the application of steam power will be found to have been "pushed just so far that any further use of it in the place of horse power would bring no net advantage." This is the margin between the profitable use of steam power and horse power. We are specially told, at the same time, in a note ¹² that "the margin here will vary with local circumstances, as well as with the habits, inclinations, and resources of individual farmers." Similarly, with regard to the margin of profitableness between different methods of business organization, it is said that it "is to be regarded not as a point

¹¹ Marshall, *op. cit.*, p. 405.

¹² *Ibid.*, p. 405.

on any line, but a boundary line of irregular shape cutting one after another every possible line of business organization.”¹³ That is to say that it possesses no general characteristic that can be made the subject of communication between man and man.

If, in economics, one is impelled to ask, these elusive phantasms have anything in them that it is either possible or desirable to convert into the subject of elaborate discussions, why then in economics alone? Wherever throughout the whole sphere of life any process of gradual change is in progress you can conjure up a “margin” quite as easily as in economics. The black-haired and black-eyed people of Europe, for example, are, at present, steadily supplanting the fair-haired and blue-eyed. Why does no one dilate on the margin of expansion reached by the former and tell us that it is now being “pushed outwards”? The reason, I imagine, is that everyone knows that by saying this he would add nothing to the statement that the one is supplanting the other. He would merely be raising a cloud of words to vex the souls of the uninitiated. We are told that we should study economic changes, say, the change from horse power to steam power “at the margin.” How could we conceivably study them anywhere else? The margin is merely the point or waving line where the change is taking place. We might as well be told that we should always study history with a reference to the past, or that in studying geography we should never fail to keep spatial conditions in view. In the process of “unconscious selection” that Darwin has occasion to refer to, by which the laying capacities of hens have been improved, why does he not think it necessary to dwell on the margin between the hens that go to the pot in early youth and those that are left to multiply and replenish the farmyard? There is undoubtedly a marginal zone somewhere between the two classes, just as truly as there is one between the use of horse power and steam power, or, between the expression of the large and of the small forms of business organization. In the interests of our present line of study it is indeed much to be desired that attention should be turned to some of the innumerable margins that are to be found in natural science, in

¹³ *Ibid.*, p. 605.

history, in theology even, and that the hard-driven margins of economics should be allowed a period of repose.

There is one application of the marginal theory that has brought it into contact with an issue that is very much alive indeed, that, viz., of the equitableness of the remuneration of labor in the modern civilized world. This circumstance has gained for it a fairly wide celebrity. We find the theory indeed, erected into a sort of theodicy, a justification of the ways of God to man. In Professor Clark's view ¹⁴ nothing less than the right of society to exist in its present form depends on the establishment of its validity. The special setting of it which is most familiar is that of Professor Marshall. The whole doctrine, however, and even the illustrations that accompany it are adaptations from von Thünen, a German economist who flourished in the earlier part of the nineteenth century, whose "brilliant researches" are spoken of in very warm language by Professor Marshall.¹⁵

Von Thünen arrives at the conclusion that "the value of the work of the last hired laborer constitutes at the same time his wages."¹⁶ This is probably the first application of the marginal concept as the basis of a theory of wages or prices of any sort, and is thus the germ of a literature that is now enormous in volume if not in value.¹⁷ Professor Marshall adopts this conclusion and to popularize it makes use of his well-known illustration of the hiring of the marginal shepherd.¹⁸ A sheep-farmer, he says, may be in doubt as to whether his staff of shepherds is sufficient. He may come to the conclusion that if he hired an additional man so many more lambs would be kept

¹⁴ *Distribution of Wealth*, p. 3.

¹⁵ Some, however, of von Thünen's mathematics are too indigestible even for the most robust of modern organs. To find the natural wage, for example, he tells us, we must multiply the indispensable needs of the laborer by the product of his work, and extract the square root! *Der isolirte Staat*, Vol. II, Part I, § 15.

¹⁶ *Ibid.*, § 19.

¹⁷ See E. von Bohm Bawerk, *Kapital und Kapitalzins*, Vol. II, Book III, chap. ii, § 1, p. 224, n.

¹⁸ Von Thünen's more or less parallel illustration is that of a laborer hired to dig potatoes.

alive that he might expect to send to market twenty more sheep every year. "Then," as he remarks, "the net product of that shepherd's labor will be twenty sheep; if the farmer can hire him for ever so little less than the price of twenty sheep¹⁹ he will decide to do so, otherwise not. The shepherd who is on the margin of not being employed—the marginal shepherd, as we may call him—adds to the total produce a net value just equal to his own wages," and thus, it is argued, the laborer gets just what he produces.

Now, of course it might happen, in a given case, as a matter of fact, that the last shepherd put on might save alive twenty sheep, and that the value of the twenty sheep might be found, after the event, to be about equal to the wages paid him; but we must take care not to confuse the individual case and the retrospective point of view with the case of generalized experience which can be used as a basis of prediction and of consequent action. It is safe to say that the sheep-farmer is not born yet who would or could think out the question of putting on an extra shepherd in the manner here represented. No one could, of course, say, with even the roughest approximation to probability, how many sheep an extra shepherd would save. In some conditions of the seasons, say, in the case of a flood, he might save hundreds, in others, none at all; nor could anyone know what next year's price of sheep would be. But our sheep-farmer would have to be informed on both these points before it would become possible for him to make the precise calculation suggested, ending in the decision that he would take the man on if he could get him for "ever so little less" than the value of the sheep that he would save.

By this line of reasoning the marginal net product of labor is put forward as if it were something that had an independent existence cognizable to anyone—something consequently that could be set up as a criterion by which to judge, in any given case, as to the fairness or unfairness of the remuneration that the laborer was getting. If we wish to realize how wide is this conception from the truth of the matter in the world as we find it,

¹⁹ Next year's price and that of succeeding years!

we have only to ask, why then is this criterion never by any chance referred to by anyone in real life? If there is such a criterion available why is not the question of the correspondence or otherwise of actual wages with it the first question that occupies everyone's attention whenever there is a dispute between capital and labor. Why did not Mr. Lloyd George, last year, when he had to endeavor to settle a dispute in the cotton trade, begin by inquiring whether the men were getting as wages the equivalent of their marginal net product or not? For the simple reason, I think, that no one in this world could tell him what the marginal net product was or where it was to be found. No one certainly could lay his hand on any operative in the cotton trade and say, "This is a marginal laborer," and much less would it be possible to say, "This is his net product." The theorists, in short, are found to be dealing not with practical realities but with empty sounds.

Let us look at the conception of the marginal net product yet a little more closely. How is the conclusion that the marginal shepherd "adds to the total produce a net value just equal to his own wages" arrived at? The method is this: We know, to begin with, what the shepherd's wages are: say for example, that they are seventeen shillings per week. We then say to ourselves that the sheep-farmer would not hire the man at that price and keep him on from year to year, perhaps, if he were steadily losing money by doing so. On this ground we conclude that the value which the shepherd adds to the produce of the farm cannot be less than seventeen shillings per week. This is the first step toward proving that it is just seventeen shillings. The next step is more complicated. We say to ourselves again something to this effect: that if the value that shepherds who can be hired at seventeen shillings per week were adding to the produce of sheep-farms were more than enough to cover their wages with interest on the capital employed, the profits of sheep-farming would be such as to attract additional capital into the business, and then the wages of shepherds would go up to something above seventeen shillings per week. As they have not done so we conclude that what the shepherd adds to the produce of the farm is

not more than seventeen shillings per week; and as we have satisfied ourselves already that it could not be less, we conclude finally that it will be just that amount. Here, then, we have the net product defined and identified. We name the last hired man the "marginal shepherd" and proceed to lay down the general law that the wages of the marginal shepherd will always be equal to his net product.

Without going into the question of the flawlessness of this reasoning for the moment, let us concentrate attention on its nature. Absolutely the only fact before us is the fact that a shepherd has been hired in the open market at seventeen shillings per week. From this alone, pure and simple, we have conjured up the whole story about the marginal shepherd and the net product of his labor. Of this elaborate conclusion it is clear that one of two things must be true; either that it is all nonsense from beginning to end, or else that, if translated into plain English and understood with the due reservations, it is all in the context already.

We find the first reservation stated for us ingenuously enough by Professor Marshall himself. It is this, that the words "net product" have, in this instance, "no real meaning."²⁰ They have no meaning, "since, in order to estimate [a man's] net product, we have to take for granted all the expenses of production of the commodity on which he works other than his own wages."²¹ In the example cited our minds are fixed on the twenty sheep. We can think of them as a net product. But take some other example; take, say, the transport of cotton from New York to Liverpool, or the spinning of fine yarns yet finer; we then have no such resource. All that we can call the net product in such cases is the value of the services that the man renders, and this we confessedly know nothing about except as inference from his wages; yet we propose to set it up as a criterion by which to judge of their equitableness. If we had no better bulwark against the discontent of the masses than this fantastic story, "society as it at present exists" would certainly be in a perilous plight.

²⁰ *Op. cit.*, p. 518.

²¹ *Ibid.*, p. 519.

The next reservation is no less than this, that the marginal shepherd is not marginal at all. He is held to be not one whit inferior in efficiency to the shepherds that have been hired before him.²² Finally we learn, to our amazement, that the other shepherds were not hired before him after all. He is not the "last hired man"! All the shepherds were hired at once. That, of course, corresponds to the state of things in modern industry much more nearly than the supposition of men being put on to work in factories one by one. Professor Clark remarks indeed that the device—his own device, of course, as well as that of the other theorists—of supposing labor to be put on unit by unit is "purely imaginary."²³ All the units are in truth precisely on a par both as to efficiency and as to the order of hiring. They are in short absolutely indistinguishable the one from the other in every possible respect. The hypothesis of the "final unit" has been from beginning to end much ado about nothing.

It is strange that the theorists do not see that by this second part of their reasoning they have completely rubbed out all that they had sketched in by the first part of it. After these last-cited statements have been delivered there cannot be, by their amended hypothesis, any longer either marginal laborers or final units of labor in existence, yet they continue freely and very extensively indeed to speak about both. All that remains of their theory now is the bare fact that when the supply of labor or of anything else is increasing there must be some unknown and unknowable item which we may think of, if we please, as being the last added to the stock, though we have no reason to suppose that it is so really. The words "final unit," if they have any meaning left, mean merely the unit that by its arbitrary selection by our fancy as being the last addition to those that are already there "brings the supply up to its present magnitude."²⁴

Prices and wages are, of course, other things being equal, determined by the magnitude of supply; and the whole story really means nothing else whatever but that this is so. It is nothing but a statement over again of the old familiar law of the effects of supply on price.

²² Marshall, *op. cit.*, p. 516.

²³ Clark, *op. cit.*, p. 165. ²⁴ *Op. cit.*, p. 180.

The device of supposing labor to be put on unit by unit is indeed one of those intolerable "hypotheses," adopted one moment to be thrown overboard the next, with which the science is becoming infested. They are said to have some analogy to the inevitable hypotheses of natural science; to assist us in "breaking up problems," and so to enable the study of the subject to be more effectively carried on. What they do really is to raise up out of nothing impenetrable fogbanks of verbosity, and to introduce and keep alive endless confusion of thought.

"An hypothesis in science," John Stuart Mill observes,²⁵ "usually means a supposition not proved to be true but surmised to be so, because if true it would account for certain known facts." In the end, of course, such hypotheses are either proved to be true or dismissed as untrue. Science knows nothing of hypotheses confessedly untrue which, for all that, are not dismissed, but, on the contrary, are descanted on as if they were true through page after page and chapter after chapter. There is, to be sure, it must be remarked, in science another class of hypotheses: a class which, as Mill thinks, might more properly be described as fictions. They comprise, for instance, the supposition of the existence in the real world of true circles, of absolutely straight lines, of a perfect vacuum and so on. These, indeed, we continue to use though we know that they are not literally exact. They are, however, so near the truth that nine-tenths of even the educated world believe them to be exactly true. They have, if possible, still less affinity than the first-mentioned class to hypotheses such as the one under consideration—the fancy that operatives in modern industry are always put on to jobs one by one, or that commodities are always bought in a series of infinitesimal increments. Such hypotheses as these are of course in flagrant contradiction to the notorious facts of life.

Another famous hypothesis that has been applied to the resolution of some of the difficulties that have arisen in connection with the marginal-shepherd theory is that of the static or stationary state. It owes its origin like the rest to von Thünen. If the

²⁵ *Logic*, people's edition, p. 149, n.

assertion should be made that in real life the wages of the marginal laborer, and consequently the current rate of wages in any given grade of labor, must conform to the value of the net product of that labor, grave difficulties at once present themselves. An objector may say, perhaps: "I am not getting the same wages that I got last year though I am turning out the same amount of work and the price of the finished commodity has not changed. Is it," he may ask, "to last year's wages or to this, that my net product must be held to conform?" The theorists when confronted with such an objection as this reply: "We do not say that the theory corresponds accurately with the conditions of real life. It only tends to do so. It would however be seen to work with absolute accuracy in the static state." The static state thus appears to be an excellent device for avoiding the necessity of bringing one's abstract statements to the test of comparison with actual conditions. What then is it? One of its characteristics, we are told, is this, that in it "labor and capital are absolute mobile."²⁶ That is to say, in it a lawyer could take charge of the Dreadnought at a moment's notice, or a curate would, without hesitation, undertake to skin a bullock. In the static state, too, the course of prices can be predicted for years ahead with perfect accuracy.²⁷ Professor Marshall tells us further that in the stationary state "the demand lists of prices would always be the same and so would the supply lists."²⁸ But if that is so how could there then ever be any variation in price at all? In any case the supposition does nothing less than blot out at one sweep all economic phenomena. Von Thünen's theory does the same. In his static state it seems there would be no variation in the ratio of supply to demand. After a human nature denuded of most of its usual characteristics has been brought on the scene the question seems to have arisen in the minds of the theorists whether the conditions which rule at present in the solar system must not also be supposed non-existent. In one passage certainly changeless seasons are postulated.²⁹ What, however, is the object of all these supposi-

²⁶ Clark, *op. cit.*, p. 29.

²⁸ *Ibid.*, p. 367.

²⁷ Marshall, *op. cit.*, p. 810.

²⁹ *Ibid.*

tions? We are told that by making them we can best approach the study of economic phenomena; but they leave us no economic phenomena to study. We might as well indeed begin the study of astronomy by supposing that there was no such thing as a law of gravitation, or begin the study of biology by supposing away heredity, variation, and the struggle for existence. Economics indeed will stand very little in the way of hypothesis. As soon as we relinquish the guidance of the conditions of real life we flounder, at once, in fathomless quicksands.

In order, however, that it should be possible for us to keep continually in touch with the conditions of real life it is essential that we should use nothing but the language of real life. I have given elsewhere, in some detail, my reasons for maintaining that the technicality which is inevitable in the natural sciences is not permissible in economics or in any of the moral sciences.³⁰ It is only necessary to say here that if we allow ourselves to use words in senses which are not their natural ones we have no longer the *reductio ad absurdum* available to force us to reject or to amend any untenable theory. Mr. Henry George dealt infinitely less in technicalities and strained uses of language than the writers whose work we have been dealing with. At the same time it is plain that if he had not allowed himself to use the words "capital" and "wages" in some sense that was his own and no one else's, he could never have put into set form the statement that "the payment of wages in production, no matter how long the process, never involves any advance of capital, or even temporarily lessens capital."³¹ If we are left, however, without resort to the *reductio ad absurdum* no progress in moral science is possible. Let us leave then to the eminent continental writers who discovered it "the margin" with its tiresome progeny of technicalities and hypotheses, and return to the sound English tradition, unhappily broken in upon for the first time forty years ago, of plain language and of common-sense.

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³⁰ *Economic Method and Economic Fallacies*, Part I.

³¹ *Progress and Poverty*, p. 46.